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# NOTICE OF ALLOWANCE AND FEE(S) DUE

45473 7590 12/27/2010 BRINKS, HOFER, GILSON & LIONE

BRINKS, HOFEK, GILSON & LIONE P.O. BOX 110285 RESEARCH TRIANGLE PARK, NC 27709 EXAMINER

CHAWLA, JYOTI

ART UNIT PAPER NUMBER

ART UNIT

DATE MAILED: 12/27/2010

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/633,207
 08/01/2003
 Robert J. Petcavich
 13779-444
 3285

TITLE OF INVENTION: PROCESS AND COATING COMPOSITION FOR EXTENDING THE SHELF LIFE OF POST HARVEST PRODUCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/28/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed oth	ng the Patent, advance on nerwise in Block 1, by (	a) specifying a new co	rrespor	ndence address;	and/or	(b) indicating a sepa	arate "F	FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fe(§) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CON	FIRMATION NO.
10/633,207 TITLE OF INVENTION	08/01/2003 T: PROCESS AND COA	TING COMPOSITION F	Robert J. Petcavich OR EXTENDING TH		LF LIFE OF PO	ST HA	13779-444 RVEST PRODUCE		3285
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nonprovisional	NO	\$1510	\$300		\$0		\$1810		03/28/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS						
CHAWLA, JYOTI		1781	426-310000	_	•				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DAT/ less an assignce is ident h in 37 CFR 3.11. Comp	nge of Correspondence		o to 3 r natively ngle fi or ager attorne be prii type) e pater an assi	registered patent y, rm (having as a nt) and the name ys or agents. If r nted.	memb s of up to nam	er a 2	locume	nt has been filed for
Please check the appropriate 4a. The following fee(s)	iate assignee category or	categories (will not be po	rinted on the patent):	Inc	dividual 🗖 Co	rporati	on or other private gr		
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).						
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no						
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010. OMB 0651-0033



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/633,207 08/01/2003		Robert J. Petcavich	13779-444	3285			
45473 7	45473 7590 12/27/2010			EXAMINER			
BRINKS, HOFER, GILSON & LIONE			CHAWLA, JYOTI				
P.O. BOX 110285			ART UNIT	PAPER NUMBER			
RESEARCH TRIANGLE PARK, NC 27709			1781				

DATE MAILED: 12/27/2010

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 199 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 199 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)				
10/633,207	PETCAVICH, ROBERT J.				
Examiner	Art Unit				
JYOTI CHAWI A	1781				

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTQL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFB 1.313 and MPEP 1308.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-- This communication is responsive to RCE of 11/02/2010. The allowed claim(s) is/are 13, 15-18 and 21. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)  $\square$  All b) ☐ Some\* c) ☐ None of the: Certified copies of the priority documents have been received. 2. 

Certified copies of the priority documents have been received in Application No. \_\_\_\_ 3. 
☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413). Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Keith D. Hendricks/ Supervisory Patent Examiner, Art Unit 1781

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## DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/2/2010 has been entered. Claims 12 and 20 have been cancelled by Examiner's amendment below and claims 13, 15-18 and 21 are allowed.

## EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms Allyn B. Rhodes on 12/16/2010.

The application has been amended as follows:

Please cancel claims 12 and 20.

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# **EXAMINER'S REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The closest art of record, cited in the office action sent on July 7, 2010, are Lee et al US patent 4729190, Yang et al. US patent 6165529. Claims as amended are directed to a process for preserving post harvest produce comprising the step of coating the post harvest produce with a coating composition comprising an aqueous emulsion of less than about 50% by weight of a polyvinylidene chloride copolymer, and from about 0.0005 to 10% by weight of a non-ionic surfactant, wherein said copolymer is formed exclusively of comonomers selected from the group consisting of vinyl chloride, vinyl acetate, methyl methacrylate, propylene, ethylene, acrylates, styrenes, and combinations thereof, and wherein the post harvest produce are fruits and vegetables.

Closest prior art to Lee teaches of coating composition including coating for seeds (See Lee Column 10, line 57 to Column 11, line 12). Lee's coating composition comprises "copolymers of monocarboxylic acids and acrylic series with one or more polymerizable vinyl or vinylidene compounds, such as vinyl halides, vinyl acetate, vinyl benzoate...methyl methacrylate, ethyl acrylate...methacrylic acids and its esters, and the like" (Column 4, lines 20-43, Column 8, lines 9-15 and Column 9, lines 35-40), which includes polyvinylidene copolymers. However, Lee coating composition requires an acid component such as monocarboxylic acids to be present (see Lee Column 4, lines 6-11 and also see applicant's remarks of 11/2/2010, page 4, last paragraph to page 5, paragraph 1), whereas the invention as claimed in claim 13 exclusively employs non-acidic polymers of polyvinylidene chloride.

The other closest prior art of record to Yang discloses a coating-for produce comprising polyvinyl alcohol, low molecular, weight starch, and a surfactant. See, Abstract. However, there is no disclosure or suggestion in Yang to coat produce with a composition comprising a polyvinylidene chloride copolymer as recited in amended claim 13. In fact, the only disclosure in Yang of coating produce with a polymer is a discussion of the disadvantages associated with coating produce with a synthetic polymer based on sucrose esters of fatty acids. See, c. 1, 1.66 - c. 2, 11. 10. (See applicant's remarks of 11/2/2010 page 5. paragraph 2 for further details.

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Thus, a process for preserving post harvest produce comprising the step of coating the post harvest produce with a coating composition comprising an aqueous emulsion of less than about 50% by weight of a polyvinylidene chloride copolymer, and from about 0.0005 to 10% by weight of a non-ionic surfactant, wherein said copolymer is formed exclusively of co-monomers selected from the group consisting of vinyl chloride, vinyl acetate, methyl methacrylate, propylene, ethylene, acrylates, styrenes, and combinations thereof, and wherein the post harvest produce are fruits and vegetables as instantly claimed is free of prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jyoti Chawla Examiner Art Unit 1781

/Keith D. Hendricks/ Supervisory Patent Examiner, Art Unit 1781